

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 August 2005 (18.08.2005)

PCT

(10) International Publication Number
WO 2005/075799 A1

(51) International Patent Classification⁷: **F01N 3/037**

(21) International Application Number:
PCT/KR2005/000324

(22) International Filing Date: 3 February 2005 (03.02.2005)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
10-2004-0008187 7 February 2004 (07.02.2004) KR
10-2004-0079691 6 October 2004 (06.10.2004) KR
10-2004-0080482 8 October 2004 (08.10.2004) KR

(71) Applicant and

(72) Inventor: YUN, Jangshik [KR/KR]; 237 Daehwa-Dong,
Daeduck-Ku, Daejeon 306-801 (KR).

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

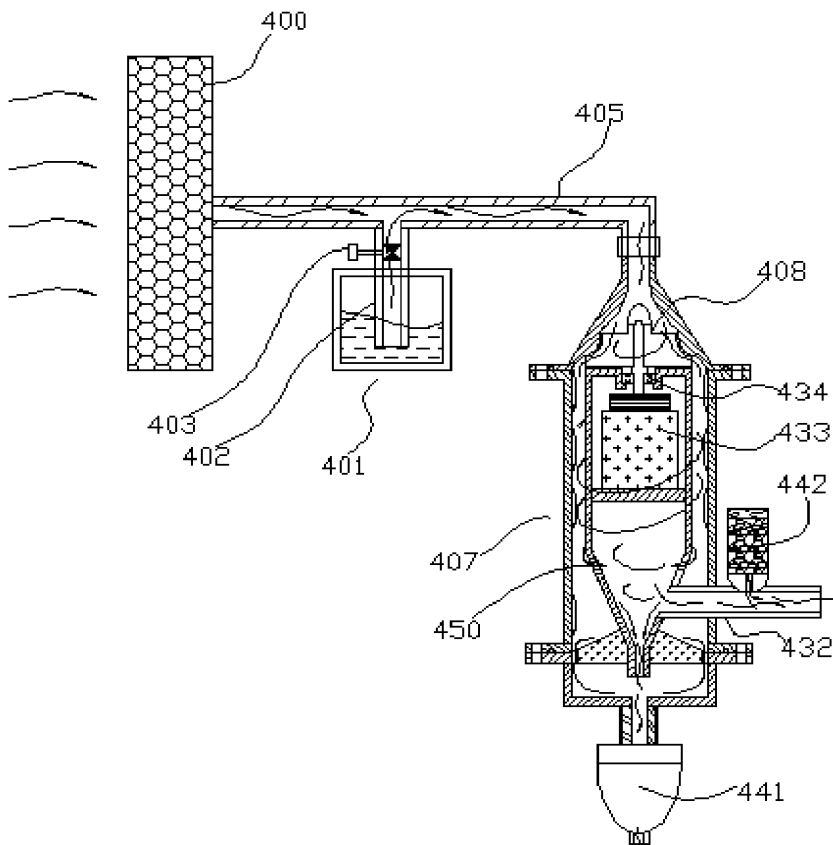
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

Published:
— with international search report

[Continued on next page]

(54) Title: WET TYPE PURIFICATION APPARATUS UTILIZING A CENTRIFUGAL IMPELLER



(57) Abstract: This invention relates to a wet type air cleaner utilizing a centrifugal impeller with an electric motor instead of using filters, thus the separation of particular dust, mist can be absolutely eliminated from air with the difference of specific gravity between gas and pollution liquid under centrifugal force. An wet type air cleaner utilizing a centrifugal impeller comprising: protection grill (400) and water tank (401) located on an inlet pipe (405), an electric motor (433) with a centrifugal impeller (408) and a bearing (434) located inside of centrifugal cleaner (407), a drain trap (441) and humidity controller (442) installed on an exit pipe (432) etc. Therefore centrifugal wet type air cleaner make fresh air efficiently to be carried out by centrifugal force without using filters in the field of home, office, passenger car, dust place like cement factory, machine center, exhaust gas cleaner for an industrial burner and an internal combustion engine.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.